April 2, 2003

TO: All Prospective Applicants

SUBJECT: Amendment No. 001 to Solicitation No. DE-PS36-03GO93001,

2003 State Energy Program Special Projects

The 2003 State Energy Program Special Projects Solicitation is amended as follows:

1. Master Solicitation No. DE-PS36-03GO93001-00:

- a. Section I. <u>Introduction</u>, the second sentence of the second paragraph is changed to read as follows: Funding of approximately \$17,000,000 will be available under this solicitation in fiscal year 2003.
- b. The example provided in Section III. A., fourth paragraph, is changed to read as follows:

Attachment 1: Cover-B-CC-01-NY.doc

Attachment 2: SF424-B-CC-01-NY.doc

Attachment 3: DOE-F-4600-4-B-CC-01-NY.doc

Attachment 4: TechSum-B-CC-01-NY.doc

Attachment 5: TechNarr-B-CC-01-NY.doc

Attachment 6: SOO-B-CC-01-NY.doc

Attachment 7: CostSharing-B-CC-01-NY.doc

Attachment 8: Resources-B-CC-01-NY.doc

- c. The following is added to Section III. A., 5) <u>Technical Narrative (10 page limit):</u> The Technical Narrative shall include a table of contents and corresponding page numbers, which will not count towards the page limit.
- d. The following is added to Appendix B, <u>Industry Interactive Procurement System</u>, under A. 12. <u>IIPS Resources</u>, and under <u>IIPS Test site</u>: **Do not click on "Go to Main View" to practice submitting applications, as this button takes you to the live site.** To start the practice session, click on the link to DE-AA01-02AA00000, then click on the button that says "Click here to Login". If you are already logged in, click on "Create Proposal". (You will not see the "Create Proposal" button until you are logged in.)
- e. In Appendix D, <u>Program Category Matrix</u>, the Funds Available (\$000) for the Clean Cities Refueling Infrastructure is changed to \$2,900.

2. Clean Cities Sub-solicitation No. DE-PS36-03GO93001-01:

- a. Estimated Funds Available is changed to read: Not to exceed \$5,400,000
- b. Category 2: Projects that develop AFV refueling infrastructure is changed to read: (approximately \$2,900,000 available)

- c. The following is added to Category 2: Up to \$800,000 will be available for E-85 (ethanol) infrastructure projects under this category. E-85 projects should include a fuel-use promotion and reporting plan which will increase awareness and encourage use of the fuel, and then report actual fuel use at the sites in the final report to DOE regional and headquarters program offices.
- d. The following is added as the last sentence to Category 3: Instructions in the Solicitation are to be followed in those instances where a conflict with program website instructions may exist.

3. Building Codes and Standards Sub-solicitation No. DE-PS36-03GO93001-03:

The 2005 Workshop requirement has been deleted; therefore, the Award Requirements is changed to read: The recipient is required to complete a final report and provide an annual presentation of its objectives and accomplishments of the project at the "Annual DOE National Workshop on State Building Energy Codes". The Applicant must budget funds to attend the 2004 National Workshop on State Building Energy Codes. The Workshop will be 2.5 days and will be held in the lower Continental United States. The date and specific location of the 2004 National Workshop on State Building Energy Codes will be announced at a later date. Each State is required to submit a final report summarizing all work completed under this project. Include in the report the dates of significant events, number of people affected, number of training sessions, estimated energy savings, and other benefits of the project, and key products produced.

4. Solar Technology Program Sub-Solicitation No. DE-PS36-03GO93001-07 is deleted and replaced with the attached and incorporate the following changes:

PROJECTS REQUESTED/AREAS OF INTEREST: Under this category, financial assistance is available for utilities to conduct measurements and analysis of the actual watts, Volt-Amp Reactives (VARs) and harmonics present on 12 distribution lines, 6 residential and 6 industrial. The feeders selected for measurement should have just one line section including the component injected from photovoltaic component (PV). The measurements will be performed on in one-second intervals. They shall commence 30 minutes after sunrise and terminate 30 minutes before sunset and be conducted on at least 100 days in the year. The 100-day interval selected should include a season with inclement weather. Measurements of two sun sensors that provide the intensity of the sun radiation throughout the same time period shall also be made. The sun sensors shall be spaced as widely apart as reasonable to provide sample sun intensity in the monitored grid. The presence of distributed generation other than PV on the monitored lines is not desired. The partnership of a utility with a university having photovoltaic experience is desired. The desired product is a database that includes the measured watts, VARs and sun irradiance on in one-second intervals for 100 days. It is intended that the database will be provided to a university and to others for statistical studies. Statistical studies by the utility and their university partner are encouraged.

EVALUATION CRITERIA: Applications will be evaluated according to the following criteria.

1. A demonstrated capability to measure irradiance, watts and VARs on <u>in</u> a 1 second interval with continuous backup of data. Data will be placed on a WEB site so that researchers have access while the data is being collected. (40 points)

ESTIMATED FUNDS AVAILABLE: \$250,000

ESTIMATED NUMBER OF PROJECTS: 1

FUNDING CEILINGS/EXPECTED RANGE OF FUNDING: The Federal Share of the cost of a project shall not exceed \$250,000

COST SHARE: No cost share required, however up to 50% encouraged

BACKGROUND AND OBJECTIVES: Islanding is the production of output power from a PV inverter (or other Distributed Energy Resource) when the utility has been disconnected. The utility may be de-energized because of a fault on the line, because the line was taken out of service for maintenance, or for a number of other reasons. The utilities have concerns that

- an island could harm a utility worker
- an island could interfere with the operation of a utility re-closer.

An issue that has been contentious is the likelihood that an inverter could island. In other words, "what is the probability that the conditions will occur that could result in an island of a PV inverter"?

PROJECTS REQUESTED/AREAS OF INTEREST: Under this category, financial assistance is available to conduct measurements and analysis of the actual watts, Volt-Amp Reactives (VARs) present on 12 distribution lines, 6 residential and 6 industrial. The feeders selected for measurement should have just one line section, including the component injected from photovoltaic (PV) component. The measurements will be performed in one-second intervals. They shall commence 30 minutes after sunrise and terminate 30 minutes before sunset and be conducted on at least 100 days in the year. The 100-day interval selected should include a season with inclement weather. Measurements of two sun sensors that provide the intensity of the sun radiation throughout the same time period shall also be made. The sun sensors shall be spaced as widely apart as reasonable to provide sample sun intensity in the monitored grid. The presence of distributed generation other than PV on the monitored lines is not desired. The partnership of a utility with a university having photovoltaic experience is desired. The desired product is a database that includes the measured watts, VARs and sun irradiance in one-second intervals for 100 days. It is intended that the database will be provided to a university and to others for statistical studies. Statistical studies by the utility and their university partner are encouraged.

EVALUATION CRITERIA: Applications will be evaluated according to the following criteria.

- 1. A demonstrated capability to measure irradiance, watts and VARs in a 1 second interval with continuous backup of data. Data will be placed on a WEB site so that researchers have access while the data is being collected. (40 points)
- 2. A close relationship with a University that has some PV experience. (20 points)
- 3. A demonstrated capability to conduct statistical studies. Analysis will include the prediction of the likelihood of conditions of a condition favoring an island. (40 points)